

CHAPTER 838 Swimming Pools

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CROSS REFERENCES

Leasing County land for - see Code of Va. §15.1-261
Construction in certain counties - see Code of Va. §15.1-280
Operation of by counties - see Code of Va. §15.1-526
Water systems - see S.U. & P.S. Ch. 1042
Water supply emergency - see S.U. & P.S. Ch. 1044
Sewers - see S.U. & P.S. Ch. 1060, Ch. 1064

IN GENERAL

838.01 SHORT TITLE.

This chapter shall be known and may be cited as the "Loudoun County, Virginia, Swimming Pool Ordinance." (Ord. 79-01. Passed 12-3-79.)

838.02 SCOPE; CONSTRUCTION STANDARDS; EXISTING POOLS.

(a) This chapter shall apply to all public pools, including all accessories incident thereto. All public pools for which building permits are issued subsequent to the effective date of this chapter (Ordinance 79-01, passed December 3, 1979) shall be constructed in accordance with provisions of the Uniform Statewide Building Code, the County Fire Prevention Code, the County Zoning Code and this chapter, provided, however, that the Health Director or his authorized agent shall order reasonable changes in existing pools and related facilities or in their operation if he finds that any condition exists that endangers the life, health or safety of the users of such public pools. In considering whether to order such changes, the Director shall consider the magnitude of the danger, the cost of the change, the magnitude of changes required and the requirements imposed by this chapter upon newly constructed public pools.

(b) The following items as set forth under the sections and subsections listed are exempt for existing pools, except for routine maintenance, remodeling or replacement of these items. Items not specifically mentioned shall apply to all public pools in the County unless they are waived by the Health Department. Exemptions do not apply to the entire section unless specifically stated by the word "all."

- (1) Section 838.09 Location. (All)
- (2) Section 838.10 Access. (Except that emergency access must be available.)
- (3) Section 838.12 Shape. (All)
- (4) Section 838.14 Recirculation Systems.
 - (a) Filter Room. Finished in a light color; construction materials; twenty foot-candle illumination standard; floor slope of one to fifty; cross ventilation; head room above filters; door of sufficient width to remove equipment.
 - (b) Components of System; Water Turnover Time. Exempt, except that turnover time shall be adequate to maintain minimum water quality standards.

- (d) Gauges. Minimum size of gauges.
- (f) Hair and Lint Strainers. Extra strainer basket.
- (5) Section 838.15 Piping Systems.
 - (d) Color coding.
 - (e) Specifications.
 - (1) Name and location of facility.
 - (2) Date of construction.
- (6) Section 838.16 Pool Outlets.
 - (a) Location of outlets.
 - (b) Size of grate opening area.
 - (c) Size of discharge piping.
- (7) Section 838.17 Construction Safety.
 - (d) Exempt from provision that electrical switches and receptacle be waterproof and corrosion resistant if they represent no safety hazard.
- (8) Section 838.18 Hydrostatic Relief Valves. (All)
- (9) Section 838.19 Pool Lighting. (All)
- (10) Section 838.20 Decks. (Except that deck features that constitute safety hazards must be repaired.)
- (11) Section 838.21 Slope of Deck Area. (All)
- (12) Section 838.22 Diving Area and Boards. (Except that owners of pools must recognize that code standards are the minimum recognized for safety reasons.)
- (13) Section 838.24 Fencing. (All)
- (14) Section 838.26 Suction Cleaners. (All)
- (15) Section 838.27 Overflow Gutters and Skimmers.
 - (a) and (b) Design criteria.
- (16) Section 838.28 Safety and Rescue Equipment; Other Safety Features.
 - (b) Letter and numeral heights (five inches); spacing on vertical surface.
 - (d) Lifeguard chair requirements.
- (17) Section 838.31 Slope of Bottom. (All)
- (18) Section 838.32 Pool Inlets. (All)
- (19) Section 838.34 Drinking Fountains. (Except that approved potable drinking water shall be available during pool operation.)
- (20) Section 838.35 Showers; Water Closets; Lavatories; Solid Waste Storage. Exempt, except that one water closet and lavatory shall be provided and maintained in a sanitary condition for each sex, and dressing room floors shall be smooth but nonslip and the room shall be ventilated.
 - (b) Storage containers for clothing shall be kept clean and sanitary.
 - (c) Existing showers must be equipped with an anti-scalding device if hot water is provided, and with suitable means of providing soap.
 - (e) Lavatories shall be provided with a suitable means of providing soap.
- Section 838.36 Spectators and Spectator Areas. Separation of spectator areas; location of spectator balconies.
- Section 838.37 Food Service; Smoking. Three-foot height requirement

for fence or barrier.

Section 838.38 Wading Pools.

- (a) Slope of bottom.
- (d) Separate filter system.

A summary of essential requirements is presented in tabular form as Appendix I at the end of this chapter. (Ord. 79-01. Passed 12-3-79.)

838.03 DEFINITIONS.

As used in this chapter:

- (a) "Backboard" means a lightweight piece of equipment to contain and support the body in an immovable prone position in cases of suspected spinal column injury.
- (b) "Bathing place" means all bodies of water sufficiently deep for complete or partial immersion of the human body and used collectively by numbers of persons for swimming or recreational bathing, together with shores, buildings, equipment and appurtenances pertaining to such bathing places.
- (c) "Director" and "Health Director" mean the Director of Public Health of the County or his authorized representative.
- (d) "Fence" means a closed-type vertical barrier, completely enclosing the pool area and capable of securing such area against entry. A woven steel wire, chain link, picket or solid board-type fence or a fence of similar construction which will prevent the smallest of children from getting through are considered to be within this definition.
- (e) "Holder of license" means a person engaged by the holder of a permit to conduct the business and management of a public bathing place.
- (f) "Hydrostatic relief valve" means a valve which, when properly installed, will relieve underground water pressure caused by a high water table under the pool shell.
- (g) "Maximum load" means the maximum number of bathers allowed in the pool area exclusive of the designated diving area, to be determined by dividing the total area, in square feet, of the swimming pool water space by twenty-seven, or by appropriate formulas listed in "Minimum Standards for Public Swimming Pools," published by the National Swimming Pool Institute.
- (h) "Operator" and "Manager" mean the person appointed or engaged by the holder of the license to conduct the operation, business and management of the bathing place.
- (i) "Operator's permit" means the permit issued by the Health Director to the operator or manager of a public bathing place.
- (j) "Owner" means the person in whose name the license or use permit is issued.
- (k) "pH" means a measure of acidity or alkalinity. The number following the symbol, pH, is the logarithm of the reciprocal of the hydrogen ion concentration.
- (l) "Pool" means any bathing place further described as follows:
 - (1) "Above-ground pool" means a pool in which all or most of the shell is above ground level.
 - (2) "Combination swimming and diving pool" means a pool in which both swimming and diving are allowed.

- (3) "Diving pool" means a pool designed for diving activities only.
- (4) "Elevated pool" means a pool constructed upon a surface entirely above the ground level.
- (5) "Indoor pool" means a pool constructed within a building.
- (6) "In-ground pool" means a pool constructed entirely or mostly below the ground surface.
- (7) "Public pool" means a pool other than a pool which is used or intended to be used as a swimming pool only by members and guests of a single-family residence.
- (8) "Residential pool" means a pool which is used or intended to be used as a swimming pool in connection with a single-family residence and available only to the family and guests of the householder.
- (9) "Seasonal pool" means a swimming pool operated for not more than six months during any one year.
- (10) "Spa pool" means a swimming pool used in conjunction with a health club or health spa.
- (11) "Spray pool" means an artificial hard-surfaced drainage area designed to remove water, at a sufficient rate to prevent impounding, from shower or spray nozzles used in conjunction therewith for spraying of human beings.
- (12) "Swimming pool" means a man-made structure constructed from material other than natural earth or soil designed or used to hold water for the purpose of providing a swimming or bathing place for any person, or any such structure for the purpose of impounding water therein to a depth of more than two feet.
- (13) "Training pool" means a pool designed for the purpose of teaching and training water activities and capable of impounding water to a depth greater than one meter. This pool shall be independent of any other bathing facility.
- (14) "Therapeutic pools" and "wood hot tubs" mean multi-occupant pools or tubs constructed for the purpose of impounding water, which generally contain water jet and/or aeration systems or are operated at high temperatures and are intended for the immersion or partial immersion therein of human beings. This does not apply to pools or tubs in health care facilities or athletic rooms.
- (15) "Wading pool" means a pool designed for wading or partial immersion of the human body only and capable of impounding water to a depth not greater than two feet.
- (16) "Year-around pool" means a pool operated more or less continuously for a period in excess of six months during any one year.
- (m) "Pool area" means a pool and all equipment and structures appurtenant thereto, including all area located within the approved perimeter security fence or barriers.
- (n) "Pool management company" means any person, firm, corporation or association contracting to manage or operate two or more bathing places. (Ord. 79-01. Passed 12-3-79.)

838.04 CONSTRUCTION AND ALTERATION; PERMIT REQUIRED; PLANS AND SPECIFICATIONS; CERTIFICATES OF OCCUPANCY.

A building permit shall be obtained from the Division of Inspections of the Department of Building and Development before any bathing place, public or residential, is constructed or substantially altered or remodeled. Plans and specifications for public bathing places must be approved by the Health Director prior to the issuance of such a permit. Plans and specifications shall be submitted in triplicate to the Division of Inspections and one set, bearing the approval of the Director, shall be returned to the applicant. No certificate of occupancy shall be issued for the use of any public pool until its equipment and operation is found, upon inspection by the Director, to be in compliance with this chapter. (Ord. 91-23. Passed 9-17-91.)

838.05 INSPECTIONS; RIGHT OF ENTRY.

The Health Director shall make inspections to determine the condition of any public pool located within the County. The Director shall have the power to enter, at reasonable times, upon any public property and upon any private or nonpublic property, but only with the consent of the owner of such pool or his agent, or with a valid search warrant, for the purpose of inspecting and investigating conditions relating to the enforcement of this chapter or of regulations adopted pursuant thereto. (Ord. 79-01. Passed 12-3-79.)

838.06 OPERATOR'S LICENSE REQUIRED; APPLICATION; QUALIFICATIONS.

When in use, each public pool shall have a person in charge and on the premises who holds a valid operator's license issued by the Department of Health. Operators' licenses shall be issued only to individuals sixteen years of age or older. An applicant for an operator's license shall demonstrate to the Health Department his or her basic knowledge of the water treatment process in bathing places and the proper technique for collection of water samples for bacteriological analysis and shall be capable of performing tests necessary in operating bathing places. Presentation of a certificate from the Swimming Pool Operators Training Association of the Washington Metropolitan Area, or from a swimming pool operator's training course acceptable to the Director, shall constitute demonstration of such knowledge. This section shall have no application to any swimming pool that has a capacity limit of forty or fewer people at any one time. (Ord. 79-01. Passed 12-3-79.)

838.07 PUBLIC POOL LICENSE REQUIRED; FEES; INSPECTIONS.

(a) Annual licenses to operate public bathing places shall be required by the Health Director. The fees for such licenses are listed in Appendix II.

(b) Annual inspections by the Health Department shall be required. A license shall not be issued until hazards, deficiencies and nonconformities with the requirements of Sections 838.09 et seq. have been corrected. (Ord. 79-01. Passed 12-3-79.)

838.08 SUSPENSION AND REINSTATEMENT OF LICENSES;
TEMPORARY POOL CLOSINGS.

(a) Suspension and Hearing. If the Health Director finds that the health and safety of those who use any public pool is menaced as a result of nonconformity by the operator or owner of such public pool with any provision of this chapter, the Director shall notify the owner of such public pool, as well as the operator in question, in writing, that he intends to suspend the operator's license of such person or the public pool license, stating the specific reasons for the suspension, and demanding strict compliance with the provisions of this chapter within ten days. The notice shall also state that such suspension is effective immediately upon receipt of such notice, but that the owner or operator shall have the right to appeal such suspension order and to demand a hearing before the Health Department, by written demand sent to the Health Director within ten days of his receipt of such notification. At such hearing, to be held within seven days of such owner's or operator's written demand, the owner or operator may be represented by counsel and may present all relevant and competent testimony and other evidence. The Director shall decide, on the basis of all the evidence before him, whether or not such owner or operator is in violation of or compliance with the provisions of this chapter and whether or not any violation constitutes a menace to the public health and safety. Such decision shall be in writing, shall state the facts and reasons upon which it is based and shall state whether the suspension is continued or removed. Any person aggrieved by the suspension of such public pool license or operator's license shall have the right to appeal, following a hearing before the Health Department, to the Circuit Court of Loudoun County.

(b) Reinstatement. Any owner or operator may request a reinspection, prior to or after the hearing before the Health Director, when the condition causing the suspension has been corrected. Upon compliance with the requirements of this chapter, the suspension shall be removed.

(c) Temporary Closings. The Health Director or his agent shall have the authority to immediately close any public pool for a temporary period upon inspection and finding a violation of any provision of this chapter which may menace the health or safety of users of the pool. (Ord. 79-01. Passed 12-3-79.)

GENERAL REQUIREMENTS FOR PUBLIC POOLS

838.09 LOCATION.

Public pools shall not be located in areas subject to flooding and inundation by ground water drainage, or in any area which may adversely affect the safety of bathers or water quality. (Ord. 79-01. Passed 12-3-79.)

838.10 ACCESS.

Direct and unobstructed access to the public pool area shall be provided for the admission of emergency and service vehicles, equipment and personnel. Where the pool area is enclosed by a fence, a gated opening of 2.5 meters (eight feet) shall be provided. Access to indoor or elevated pools shall be provided adjacent to the entrance nearest the pool or the elevator or stairway leading to the pool. Permanent and conspicuous signs shall be posted indicating the most direct route to the pool. (Ord. 79-01. Passed 12-3-79.)

838.11 SECURITY; TREATMENT OF IMPOUNDED WATER.

Public pools shall be maintained in a manner that will not create a nuisance or hazard to the public safety and well-being. When not in use, the pool shall be adequately secured against entry by the public in general. The impounded water shall, at all times, be treated in a manner that will prevent the growth of algae and the breeding of mosquitos or other vermin. (Ord. 79-01. Passed 12-3-79.)

838.12 SHAPE.

Pools may be of any dimension or shape, provided that satisfactory recirculation of water can be obtained and undue hazards to bathers are absent. (Ord. 79-01. Passed 12-3-79.)

838.13 SWIMMING POOL CONSTRUCTION MATERIALS.

Swimming pools shall be constructed of materials that are inert, impervious and nontoxic to man; that will provide a tight tank with a smooth, easily cleaned surface with no cracks or open joints, or to which a smooth, easily cleaned surface finish with no cracks or open joints can be applied; and that may be finished in white or light color. (Ord. 79-01. Passed 12-3-79.)

838.14 RECIRCULATION SYSTEMS.

(a) Filter Room. Public pools shall be provided with a structure or room to contain the filtration equipment, pumps and other recirculation system appurtenances. The room shall be finished in a light color and be constructed of materials that are impervious to water and chemicals necessary for the operation of the pool. Adequate illumination of twenty foot-candles shall be provided by a minimum of two vaporproof lighting fixtures. The floor of the filter room shall be designed to provide for adequate drainage with a floor slope of one to fifty to the drain and shall be kept dry particularly in the vicinity of electrical panels. The filter room shall be adequately cross ventilated and all equipment shall be installed so that it is convenient to operate and repair. Adequate head room shall be provided above all filters. Facilities for discharging filter backwashing water onto the filter room floor are prohibited. The room shall be provided with a door or doors of sufficient width to permit the removal of equipment and shall be capable of being secured against entry by unauthorized persons.

(b) Components of System; Water Turnover Time. All public pools shall be equipped with a recirculating system consisting of pumps, hair and lint catchers, filters, disinfection equipment and necessary pipe connections to the inlets and outlets. Adequate provision shall be made for backwashing filters. The recirculation system shall be designed for a turnover time of pool water according to the following table:

<u>Type of Pool</u>	<u>Turnover Time (hrs.)</u>
Diving	8
Swimming	6
Training	4
Wading	2
Combination diving and swimming	6
Spa	4
Therapeutic and wood hot tubs	1/4

(c) Filter Designs. The recirculation system shall be equipped with a filtration system that will filter the entire contents of the pool at the required rate. Design criteria for the various types of filters shall be as follows:

- (1) Sand filter. A sand filter is a filter utilizing sand as the filter medium, with a filtration flow rate not exceeding 122 liters per minute per square meter (three gallons per minute per square foot) of filter area. The backwash rate of flow shall be four times the filtration rate.
- (2) Anthracite filter. An anthracite filter is a filter utilizing anthracite as a filter medium with a filtration flow rate not exceeding 122 liters per minute per square meter (three gallons per minute per square foot) of filter area. The backwash rate of flow shall be three times the filtration rate.
- (3) High-rate filter. A high-rate filter is a filter utilizing a medium capable of filtration at a high rate of flow. The rate of flow shall be not less than 611 liters per minute per square meter (fifteen gallons per minute per square foot) of filter area. The backwash rate of flow shall be the same as the filtration rate.
- (4) Diatomaceous earth filter. A diatomaceous earth filter is a filter utilizing diatomaceous earth as a filter medium. There are two types, as follows:
 - A. The pressure or vacuum type, which is a diatomaceous earth filter through which the rate of flow does not exceed 81.5 liters per minute per square meter (two gallons per minute per square foot); and
 - B. The pressure or vacuum type with a slurry feeder, which is a filter equipped to continuously feed a diatomaceous earth suspension and having a rate of flow not exceeding 122 liters per square meter (three gallons per minute per square foot). A backwash sump pit with a stand pipe shall be installed to collect spent diatomaceous earth so that it can be collected and disposed of with solid waste.
- (5) Other filters. A filtration system, other than those described above, shall not be permitted in any pool without the approval of the Health Director.

(d) Gauges. Gauges shall be installed on all filter systems to readily indicate the

operating pressures of recirculating systems. All gauges shall measure pressure

directly in kilograms per square meter or pounds per square inch and shall have an indicator face at least ten centimeters (four inches) in diameter.

(e) Rate of Flow Indicators. The recirculation system shall be equipped with a rate of flow indicator, approved by the Health Director, reading in liters per minute or gallons per minute located so as to indicate the rate of flow of filtered water returned to the pool. The indicator shall be of fixed calibration and properly sized so as to indicate the designed rate of flow at approximately mid-scale.

(f) Hair and Lint Strainers. The hair and lint strainer, where required, shall be installed ahead of the filter pump and be designed and located so that it can be easily and simply dismantled for cleaning and inspection. At least one extra strainer basket shall be provided. Hair and lint strainers are not required where gravity filters are used. (Ord. 79-01. Passed 12-3-79.)

838.15 PIPING SYSTEMS.

(a) The piping system for public pools shall be composed of N.S.F. approved materials, or equivalent, designed for the following operations:

- (1) Filling the pool;
- (2) Recirculating the pool water through the treatment equipment;
- (3) Washing each filter individually;
- (4) Backwashing to waste;
- (5) Operating the suction cleaner if the pool is equipped with such a cleaner;
- (6) Emptying the pool; and
- (7) Draining the entire system.

(b) There shall be no direct connection between the pool recirculating system and the sewer or the potable water supply.

(c) Waste from backwashing shall be discharged into a storm sewer or in a manner approved by the Health Director. When only a sanitary sewer is available to a swimming pool, the rate of discharge is subject to the approval of the Director and the Loudoun County Sanitation Authority.

(d) The piping system within the filter room shall be securely anchored and shall be color coded as follows:

- Fresh water - blue (to check valve)
- Backwash - black
- Influent - yellow
- Effluent - white
- Vacuum - orange

(e) A permanent specification placard shall be conspicuously affixed to the filter room wall. Specifications shall be printed in contrasting colors. The following information shall be included on the placard:

- (1) The name and location of the facility;
 - (2) The date of construction;
 - (3) The capacity in liters and gallons;
 - (4) The area in square meters and square feet;
 - (5) The turnover time in hours;
 - (6) The rate of flow in liters per minute and gallons per minute; and
 - (7) The head loss at which filters should be backwashed.
- (Ord. 79-01. Passed 12-3-79.)

838.16 POOL OUTLETS.

(a) All public pools shall have one or more main outlets in their deepest part for continuous removal of water for treatment and re-use and for emptying the pool. A main outlet shall be not less than one meter (three feet) nor more than six meters (twenty feet) from another main outlet and not more than five meters (fifteen feet) from a pool wall.

(b) A main outlet opening shall be covered with a grating which is not hazardous to bathers, is secured in place and is removable with tools. The grate opening area shall be large enough to have water entrance velocities not exceeding 0.6 meters per second (two feet per second).

(c) Main outlet discharge piping shall be sufficient for removal of the water through it at a rate of at least 100 percent of the swimming pool design recirculation flow rate. The piping system shall be valved to permit adjustment of flow through it. (Ord. 79-01. Passed 12-3-79.)

838.17 CONSTRUCTION SAFETY.

(a) Pumps, filters and other mechanical and electrical equipment for public pools shall be enclosed in such a manner as to be accessible only to authorized persons and not to bathers. Construction and drainage shall be such as to avoid the entrance and accumulation of water in the vicinity of the electrical equipment.

(b) The crossing of outdoor bathing places and other swimming pools by overhead electrical conductors is absolutely prohibited. Overhead electrical conductors crossing areas contiguous to outdoor bathing places shall comply with the requirements of the National Electrical Safety Code, the latest edition, paragraph 680-8.

(c) All metal fences or railings on which a broken electrical conductor might fall shall be effectively grounded. For this purpose, driven ground rods shall be placed at two locations close to and on either side of each crossing. For parallel exposure exceeding 100 meters (300 feet), additional ground shall be provided at mid-point or at intervals not to exceed 100 meters (300 feet).

(d) All lighting fixtures shall be protected in a manner that will prevent broken glass from falling on any surface within the pool area. All electrical switches and receptacles shall be of weatherproof construction and resistant to corrosion.

(e) Lights shall be prohibited above or within one meter of the pool rim in any indoor or covered swimming pool.
(Ord. 79-01. Passed 12-3-79.)

838.18 HYDROSTATIC RELIEF VALVES.

In all in-ground public pools, one or more hydrostatic relief valves, approved by the Health Director, shall be installed for the purpose of relieving the water pressure on the pool shell.
(Ord. 79-01. Passed 12-3-79.)

838.19 POOL LIGHTING.

(a) When intended for use after dark, public swimming pools shall have an illumination above the water surface of at least five foot-candles. The lighting shall be designed and installed to prevent glare in the pool and pool area and to create no hazard to bathers.

(b) Underwater lighting for such pools shall provide eleven watts per square meter (one watt per square foot) of water surface and shall require ground fault circuit interrupters (GFCI).
(Ord. 79-01. Passed 12-3-79.)

838.20 DECKS.

There shall be a deck at least one and one-half meters (five feet) wide and extending around the entire perimeter of a public pool. The width of the coping may be included in this dimension. There shall be at least one meter (3.28 feet) of deck behind any diving stand or guard chair. The deck shall be constructed of concrete or other impervious material. The material shall have a nonslip but smooth finish. The deck shall have a pitch of not less than one to fifty (one-quarter of an inch to the foot) and be designed to conduct drainage away from the pool area in a manner that will not create or maintain pools of water or a nuisance. In addition, all fill under decks shall be properly tamped and proper supports shall be provided to prevent decks from settling. A type of pool designed with outlets near or over the top may, within a maximum of three meters (ten feet) from the pool edge, have the deck slope to a continuous drain or multiple drains. The overflow or deck drainage from this type of area may be filtered and returned to the pool. Such an arrangement shall still necessitate an outside area sloping away from the pool as required above. Roof run-off or other drainage shall not be wasted onto the deck. All areas surrounding the deck shall have surface drainage directed away from the deck area. Decking or floor area around therapeutic pools or hot tubs need only be three feet wide and not necessarily extend around the entire perimeter. The floor covering material shall be nonslip, nonabsorbent and adequately drained.
(Ord. 79-01. Passed 12-3-79.)

838.21 SLOPE OF DECK AREA.

The decks shall have a minimum slope of one to fifty and a maximum slope of one to twenty-five and be designed to prevent deck drainage from entering the pool water. (Ord. 79-01. Passed 12-3-79.)

838.22 DIVING AREA AND BOARDS.

(a) At least 3.9 meters (thirteen feet) of free and unobstructed head room shall be provided above diving boards.

(b) Where multiple diving boards are used, the space between centerlines shall be not less than 3.35 meters (eleven feet), except boards, .75 meters (thirty inches) and under, and no board over .75 meters (thirty inches) above the water shall be closer than 3.6 meters (twelve feet) from the centerline to a side wall. Boards .75 meters (thirty inches) and under shall not be closer than three meters (ten feet) from the centerline or to a side wall and the space between centerlines shall not be less than three meters (ten feet). These dimensions shall apply both at the end wall and at the point of maximum depth.

(c) The space between centerlines of three-meter and five-meter diving boards shall not be less than 4.6 meters (fifteen feet). The space between center lines of five-meter and ten-meter platforms shall be not less than 5.5 meters (eighteen feet). The minimum distances from centerlines of five-meter and ten-meter platforms shall be the same as the distances from side walls.

(d) The minimum dimensions of diving areas shall be as provided in Table I or Table II.
(Ord. 79-01. Passed 12-3-79.)

page 33 is mounted; see Code

page 34 is mounted; see Code

838.23 ENTRANCES AND EXITS.

Whenever a public or private pool is not in operation, all entrances and exits shall be secured against entry.

(Ord. 79-01. Passed 12-3-79.)

838.24 FENCING.

All public swimming pool areas shall be completely enclosed with an approved fence, or an equivalent barrier, at least 1.83 meters (six feet) high and not more than two inches from the ground, and shall have at least one gate of 1.22 meters (four feet) minimum width. Gates in this enclosure shall be self-closing and shall have latches or locks at least 1.22 meters (four feet) above the ground. Emergency and service gates having a horizontal opening of 2.5 meters (eight feet) shall be provided. Where a grassed area is provided with the pool enclosure for swimmers, there shall be a waist high shower spray (pullchain actuated) at each entrance to the pool deck.

(Ord. 79-01. Passed 12-3-79.)

838.25 STEPS AND LADDERS.

Two or more means of egress shall be provided for all public pools having a perimeter greater than 30.5 meters (100 feet) and one means of egress for public pools 30.5 meters (100 feet) or less. The number and location of such means of egress shall be based on one additional means of egress for each additional sixty-one meters (200 feet) of pool perimeter or fraction thereof. The treads of all steps, ladders and stepholes shall be of nonslip construction. When built-in (recessed) steps are constructed in place of ladders, they shall not protrude into the pool and they shall be provided with one or more handrails.

(Ord. 79-01. Passed 12-3-79.)

838.26 SUCTION CLEANERS.

A suction cleaner shall be provided. Where a suction cleaner is operated by the recirculating pump, a device shall be provided for throttling the flow from the pool outlets. The suction cleaner line shall be connected through a hair catcher. Portable vacuum cleaner units shall be provided with outlets near the pool for the discharge of effluent. Hydraulic jet-type suction cleaners shall be permitted in lieu of the above where fresh water pressure is 2.1 kilograms per square centimeter (thirty p.s.i.) or greater, provided they are equipped with an approved backflow prevention device if connected to the potable water supply.

(Ord. 79-01. Passed 12-3-79.)

838.27 OVERFLOW GUTTERS AND SKIMMERS.

Overflow gutters or skimmers shall be provided on the vertical wall of all public pools and so designed and maintained as to adequately skim the pool surface.

- (a) Where overflow gutters are used, they shall extend completely around the swimming pool, except at steps or recessed ladders. The overflow gutter shall also serve as a handhold. This gutter shall be capable of continuously removing sixty percent or more of the recirculated water and returning it to the filter. All overflow gutters shall be connected to the recirculation system through a properly designed surge tank. The gutter, drains and return piping to the surge tank shall be designed to rapidly remove overflow water caused by recirculation displacement, wave action or other causes produced from the maximum pool bathing load. The opening into the gutter beneath the coping shall be not less than ten centimeters (four inches) and the interior of the gutter shall be not less than 7.6 centimeters (three inches) wide with a depth of at least 7.6 centimeters (three inches). Where large gutters are used, they shall be designed to prevent entrance or entrapment of bathers' arms or legs. The overflow edge or lip shall be rounded and not thicker than 6.35 centimeters (2.5 inches) for the top five centimeters (two inches). The overflow outlets shall be provided with outlet pipes which shall in any case be at least five centimeters (two inches) in diameter. The outlet fittings shall have a clear opening in the grating at least equal to one and one-half times the cross-sectional area of the outlet pipe.
 - (b) Where skimmers are used they shall be provided at the rate of one skimmer per 12.2 meters (forty feet) of perimeter, or one per 37.2 square meters (400 square feet) of pool surface or less, spaced so as to provide maximum skimming action of the pool surface.
 - (1) Skimmer throats shall not be greater than the width required for weirs twenty-five centimeters (ten inches) long.
 - (2) Skimmer weirs shall be automatically adjustable to variations in water level over a minimum range of eight centimeters (three inches).
 - (3) A removable basket or screen to trap large solid matter shall be provided in each skimmer.
 - (4) The outlet pipe from each skimmer shall contain a device for regulating the flow of water from the skimmer throughout the entire range from the design rate of flow to shut-off.
 - (5) The water velocity through the skimmer shall not be less than seventy-six liters per minutes (twenty gallons per minute) nor greater than 115 liters per minute (thirty gallons per minute).
- (Ord. 79-01. Passed 12-3-79.)

838.28 SAFETY AND RESCUE EQUIPMENT; OTHER SAFETY FEATURES.

(a) Every public pool shall be equipped with the following aids to safety and rescue which shall be readily accessible at all times:

- (1) One or more light but strong poles with blunted ends not less than four meters (twelve feet) in length;

- (2) One or more throwing ring buoys not less than thirty-eight centimeters (fifteen inches) in diameter and having a length of sixty-eight kilogram (150 pound) test line attached sufficient to reach twice the width of the pool, placed on racks or hooks at strategic points adjacent to the pool;
- (3) A first-aid kit, approved by the Health Director, which shall be kept filled and readily accessible for emergency use;
- (4) A readily accessible room or area designated and equipped for emergency care of casualties, which room or area shall have the following equipment at a minimum: the first-aid kit previously referred to, a stretcher or cot, a backboard and two blankets for emergency use only;
- (5) A telephone with a selected list of telephone numbers for:
 - A. The nearest ambulance service;
 - B. The nearest hospitals having emergency rooms; and
 - C. The nearest police department, fire department and rescue squads.

(b) The depth of water in pools shall be marked at every 0.3 meter (one foot) increment of depth and at least every six meters (twenty feet) on both the vertical surface of the pool wall and the horizontal surface above it. Numerals and letters shall be at least 12.5 centimeters (five inches) in size and a good contrast with the pool walls and deck.

(c) Fixed and floating platforms in swimming pools shall be constructed with an air space of at least 0.3 meter (one foot) between the water surface and the underside of the platform.

(d) There shall be one lifeguard chair provided for every 2,000 square feet of water surface.

(Ord. 79-01. Passed 12-3-79.)

838.29 WATER SUPPLY.

Water supply in all public pools shall be from an approved source.

(Ord. 79-01. Passed 12-3-79.)

838.30 SEWAGE DISPOSAL.

All sewage shall be disposed of into an approved sewage treatment plant or, in the absence thereof, into an approved sewage disposal system.

(Ord. 79-01. Passed 12-3-79.)

838.31 SLOPE OF BOTTOM.

In depths of less than 1.5 meters (five feet), the maximum slope shall not exceed one to twelve. In depths greater than 1.5 meters (five feet), the slope shall not exceed one to three.

(Ord. 79-01. Passed 12-3-79.)

838.32 POOL INLETS.

Where inlets are in pool walls, such inlets shall be spaced not more than six meters (twenty feet) on center around the pool perimeter. Where inlets are in the pool bottom, the number of such inlets shall equal the perimeter of the pool in meters divided by six (feet divided by twenty). The inlets shall be so located as to insure the proper distribution of filtered water. All inlets, except fresh water inlets and wading pool inlets, shall be at least thirty-eight centimeters (fifteen inches) below the overflow level of the pool. Each inlet shall be provided with a means of adjusting flow through a range of at least fifty percent of its design capacity. The control shall be readily accessible and not require the use of special tools.
(Ord. 79-01. Passed 12-3-79.)

838.33 WATER TEMPERATURE CONTROL.

Indoor public pools shall be provided with water heating equipment thermostatically controlled and capable of maintaining the entire pool contents between twenty-one and 29.4 degrees Centigrade (seventy and eighty-five degrees Fahrenheit). (Ord. 79-01. Passed 12-3-79.)

838.34 DRINKING FOUNTAINS.

Each public pool shall have at least one drinking fountain within the pool area readily accessible to bathers.
(Ord. 79-01. Passed 12-3-79.)

838.35 SHOWERS; WATER CLOSETS; LAVATORIES; SOLID WASTE STORAGE.

(a) Generally. Adequate showers, water closets, urinals and lavatories shall be provided and maintained in a sanitary manner for each sex, assuming an even distribution of the sexes at the time of maximum bathing load, at all public pools. The part of the structure containing the showers, water closets, urinals and lavatories shall be designed so that these facilities are in a line of travel used by the patrons prior to entering the pool area and shall be provided with an entrance and a separate exit opening directly to the pool deck. However, such exit shall not be near the deep portion of the pool.

Floors for all dressing rooms, showers, toilets and lavatories shall have a minimum pitch of one to fifty (one-quarter inch per foot) to the drains with no low spots that will allow water to stand. Such floors shall have a smooth but nonslip finish and the room shall be ventilated so that the floors do not remain damp or wet.

(b) Dressing Rooms. Separate dressing rooms shall be provided for both sexes. Metal lockers, wire baskets, hooks or other sanitary means of storage of clothing and personal accessories shall be provided. All storage containers for clothing shall be kept clean and sanitary.

(c) Showers. Showers shall be provided in the proportion of one for each forty persons at the time of maximum load. Each shower shall supply an adequate quantity of heated water through a device that will prevent scalding. Water from each shower shall drain separately and each shower shall be provided with suitable facilities for making soap available.

(d) Toilets. Toilet facilities shall be provided in the proportion of one water closet for each forty females at the time of maximum load. One water closet and one urinal shall be provided for each sixty males at the time of maximum load. The urinals and water closets shall be so located that the bathers will pass by them on their way to the swimming pool. Computations shall be based on the premise that at the times of maximum load one-half of the bathers will be male and one-half female.

(e) Lavatories. Lavatories shall be provided in the proportion of one for each sixty persons expected at the time of maximum load. Each lavatory shall be provided with suitable facilities for making soap available.

(f) Motel Facilities. Motels and other like establishments which restrict the use of the bathing place to occupant guests shall be deemed to comply with subsection (b) hereof. The Health Director may waive any of the provisions of subsections (c), (d) and (e) hereof if he determines that existing facilities are sufficient to protect the public health.

(g) Multifamily Dwelling and Condominium Facilities. Subsection (b) hereof shall not apply to any public swimming pool located on the premises of any multifamily dwelling or condominium used only by the residents of any such multifamily dwelling or condominium and their guests. The Director may waive any of the provisions of subsections (c), (d) and (e) hereof if he determines that existing facilities are sufficient to protect the public health.

(h) Solid Waste Storage Facilities. Solid waste storage facilities are required in the bath house, in spectator areas and in food service areas.
(Ord. 79-01. Passed 12-3-79.)

838.36 SPECTATORS AND SPECTATOR AREAS.

Spectator areas shall be so separated from the public pool area that spectators do not have access to the pool area. Spectator balconies shall not overhang any portion of the pool surface. No person in street clothes shall be allowed on the deck of the swimming pool within 1.5 meters (five feet) of the water, except operating personnel, the Health Director or personnel engaged in repair work. Exceptions may be made for swimming meets, but in any case spectators in street clothes at these meets shall not be permitted on any part of the deck area draining into the swimming pool.
(Ord. 79-01. Passed 12-3-79.)

838.37 FOOD SERVICE; SMOKING.

Food preparation or service facilities may be permitted within the pool area or enclosure, provided that these facilities are separated from the pool by a fence or suitable barrier at least one meter (three feet) high. No refreshments or food shall be consumed in the deck area or served in glass or metal containers. Smoking may be permitted in the pool area, provided the smoking section is separated from the pool deck by a fence or suitable barrier one meter (three feet) in height.
(Ord. 79-01. Passed 12-3-79.)

838.38 WADING POOLS.

(a) The slope of the bottom of any wading pool shall not be greater than one to fifteen.

(b) Wading pools shall be so designed that no obstruction is located within an area bounded by a line 1.5 meters (five feet) outside of the pool perimeter. Such pools shall be surrounded by a fence not less than 1.22 meters (four feet) high. At least one self-closing gate, 1.22 meters (four feet) in width, shall be installed in the fencing.

(c) Where wading pools are within the enclosure of the main pool area, they shall be separated from the main pool by a fence or other suitable barrier at least one meter (three feet) high.

(d) A wading pool shall have a filter system completely separate from any swimming pool. (Ord. 79-01. Passed 12-3-79.)

838.39 DISINFECTION EQUIPMENT.

(a) Chemical Feeding Equipment. Means shall be provided for regulating the feeding of chemicals to the water in the recirculation system. The installation of mechanically operated, positive chemical feeders or open-type chemical feeders is required.

(b) Chlorinating Equipment. All public pools shall be provided with approved chlorinating equipment which shall be capable of applying a dose of up to ten p.p.m. of chlorine within the turnover time.

(c) Chlorine Gas. The use of chlorine gas as a disinfectant shall require the approval of the Health Director. Such approval shall be granted only after it has been demonstrated that the gas room or area will be located in a manner that will not adversely affect the safety and health of bathers, pool personnel or the public. Chlorine gas feeding equipment and chlorine gas cylinders and other hazardous chemicals shall be installed in an enclosed space or room separate from the filter room and electrical panels and shall be equipped with a door capable of being locked. Gas chlorinator rooms shall be equipped with a forced draft fan exhausting to the outside from the floor level. The exhaust fan shall be capable of providing sixty air changes per hour against the resistance offered by duct work or any other local factors. A fresh air inlet shall be provided near the ceiling. The gas chlorinator room shall be located above ground level and below deck level of the swimming pool. The chlorine gas tanks shall be protected from direct sunlight and fastened in place during storage and use. An approved self-contained gas mask for chlorine or a gas mask with a supply of oxygen under positive pressure or compressed air, either of which has been approved by the United States Bureau of Mines in addition to local approval by the Fire Marshal, shall be provided where chlorine gas is being utilized. Canisters for chlorine gas masks shall be replaced after each use or removal of the seal. They shall also be replaced if not used or unsealed before the manufacturer's expiration date. The mask shall be located accessible to, but outside of, the gas chlorinator room.

(d) Protective Clothing. Protective clothing, i.e. face masks, rubber gloves and aprons or coveralls, shall be provided for personnel handling caustic and chlorine chemical compounds.
(Ord. 79-01. Passed 12-3-79.)

OPERATIONS OF PUBLIC POOLS

838.40 CONDITION OF EQUIPMENT.

All equipment shall be maintained in satisfactory operating condition during operation of the pool.
(Ord. 79-01. Passed 12-3-79.)

838.41 CLARITY OF WATER.

At all times when the public pool is open for use, the water shall be sufficiently clear to permit a disc fifteen centimeters (six inches) in diameter, divided into alternate black and white segments, when placed on the bottom of the pool at the deepest point, to be clearly visible from the pool deck at all distances up to ten meters (ten yards) in a horizontal direction from the projection of the disc on the pool surface. The disc may be permanently affixed to the bottom of the pool. The main drain grate will be an acceptable substitute for such disc.
(Ord. 79-01. Passed 12-3-79.)

838.42 WATER TREATMENT.

(a) Chemicals other than chlorine, sodium hypochlorite, calcium hypochlorite, muriatic acid, sodium bicarbonate, lime, soda ash, aluminum sulfate (alum) and sodium bisulfate shall not be used to treat swimming pool water without written permission from the Health Director.

(b) Ammonia and alum shall not be used.

(c) Alum shall not be fed continuously to pool water in sand or anthracite filters. Formation of alum floc shall be achieved separately and applied directly to the filter influent immediately after the backwash and continuing into the early part of the filter cycle.

(d) At all times when the swimming pool is open for use, a minimum of .5 p.p.m. of free chlorine residual shall be maintained in all parts of the pool. The chlorine residual in therapeutic pools and hot tubs must be maintained at 1.5 p.p.m. or higher.

(e) At all times when the swimming pool is open for use, the alkalinity of the pool shall be kept between a pH of 7.2 and 8.0 with a minimum alkalinity of fifty p.p.m.

(f) Approved test kits for free chlorine residual, alkalinity and pH shall be kept available and in good working order at all times. The pH test kit shall be capable of determining pH within a range of at least 6.8 to 8.2. Diethyl-paraphenylene-diamine (DPD) is recommended for determining free chlorine residual since orthotolidine does not differentiate between free and combined chlorine residual. The test kit shall have a colorimetric range of 0.1 p.p.m. to 2.0 p.p.m. for chlorine residual.

(g) Where cyanuric acid is authorized as a stabilizing agent of residual chlorine, or if the source of residual chlorine is from a chlorinated cyanurate, a chlorine residual of at least 1.0 p.p.m. shall be maintained with cyanuric acid residuals of twenty-five p.p.m. and at least 1.5 p.p.m. chlorine shall be maintained with cyanuric acid residuals of fifty p.p.m. A testing kit for measuring the concentration of cyanuric acid, accurate within 5.0 p.p.m., shall be provided at each swimming pool using cyanuric acid or chlorinated cyanurates.

(h) The operator or manager of each swimming pool shall cause an adequate supply of chemicals for the proper treatment of pool water to be on hand and available for use at all times.

(i) The operator or manager of each swimming pool shall maintain and operate all mechanical equipment in a safe and proper manner.
(Ord. 79-01. Passed 12-3-79.)

838.43 WATER CONTAMINATION.

The injection of body wastes, including sputum, into a pool is prohibited. Overflow gutters or skimmers shall be used for expectoration. A pool contaminated by human or animal feces shall be closed immediately and the County Health Department advised. In such a case, the following actions shall be taken by the pool management, unless waived by the Health Department:

- (a) Close the pool until the total volume of water can be passed through the filtering system, i.e. for the turnover time;
 - (b) Capture fecal material in a container for disposal, if possible;
 - (c) Raise the free chlorine residual to 2.0 p.p.m.;
 - (d) Vacuum the bottom of the pool for waste;
 - (e) Overflow the pool; and
 - (f) Backwash the filter after one hour.
- (Ord. 79-01. Passed 12-3-79.)

838.44 RECORDS.

Record forms supplied by the Health Department or the equivalent shall be maintained up to date and shall be available for inspection at all times while the pool is in use. Free chlorine residual and pH test results shall be recorded at least once every two hours while the pool is in operation. Alkalinity tests shall be made and recorded at least weekly. (Ord. 79-01. Passed 12-3-79.)

838.45 PLACARDS.

Placards, approved by the Health Director, covering personal health regulations, shall be posted in the pool area, dressing rooms and pool entrances. Areas restricted to operating personnel shall be prominently identified. Signs warning employees of hazards and emergency procedures to be followed in case of exposure or contact with hazardous materials shall be posted in the room or area where such hazardous materials are stored and/or used.
(Ord. 79-01. Passed 12-3-79.)

838.46 SHOWERS REQUIRED.

Every person entering the pool areas shall be required to take a shower. Individuals leaving the pool area or enclosure shall be required to take a shower before returning.

(Ord. 79-01. Passed 12-3-79.)

838.47 PRECAUTIONS RELATIVE TO COMMUNICABLE DISEASES.

Any person having a skin disease, nasal or ear discharge, inflamed eye or any communicable disease shall be excluded from public pools.

(Ord. 79-01. Passed 12-3-79.)

838.48 BOISTEROUS AND ROUGH PLAY.

Boisterous and/or rough play and running at any public bathing place is prohibited. Regulated water sports may be permitted under adequate supervision.

(Ord. 79-01. Passed 12-3-79.)

838.49 LIFEGUARDS.

Pool lifeguards shall be properly trained and qualified lifesavers shall be certified by a competent lifeguard training organization. At least one lifeguard shall be on duty for each seventy-five persons or fraction thereof in the pool enclosures at any one time. Lifeguards shall wear distinguishing emblems or clothing. The Health Director may, depending upon the pool layout and the number of swimmers, require that more than the minimum number of lifeguards be provided in order to maintain proper safety standards.

Notwithstanding any of the provisions of this chapter, all pools that fall within the general requirements of this chapter, but which have a capacity limit of not more than forty people at any one time, shall designate and have on the premises a reliable and competent person as a lifeguard, which person need not meet the certification or training requirements of this section. The management shall provide, for the use of such person, such life-saving equipment as may be required depending upon the size and depth of the pool. (Ord. 79-01. Passed 12-3-79.)

838.50 LAUNDERING.

Bathing suits, towels and other reusable cloth materials furnished by a pool shall be properly laundered so as to be sanitary before being issued to bathers.

(Ord. 79-01. Passed 12-3-79.)

838.51 POOL MANAGEMENT COMPANIES; DUTIES.

All pool management companies, within ten days after commencing operation of a pool, shall provide the Health Director the names and location of all pools they operate in the County and the names, telephone numbers and addresses of their operating personnel. Such companies shall be responsible for having an agent present, holding an operator's license, at all times during which the pool or pools are in operation.

(Ord. 79-01. Passed 12-3-79.)

838.52 ANIMALS.

Animals, fowl and pets shall not be permitted within a pool area. This section shall not apply to working dogs, such as seeing-eye dogs.

(Ord. 79-01. Passed 12-3-79.)

838.53 EFFECTIVE DATE.

This chapter shall become effective ninety days after adoption.
(Ord. 79-01. Passed 12-3-79.)

838.99 PENALTY; EQUITABLE REMEDIES.

(EDITOR'S NOTE: See Section 202.99 for general Code penalty if no specific penalty is provided.)

In addition to the penalty provided in Section 202.99, a violation or noncompliance with any of the provisions of this chapter may be restrained, prohibited or enjoined by appropriate proceedings.

(Ord. 79-01. Passed 12-3-79.)

Appendix I, page 45, see Code.

Appendix I (Cont.), page 46, see Code.

Appendix I (Cont.), page 47, see Code.

Appendix II, page 48, see Code.